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EXAMINER

GILLIS, BRIAN J

ART UNIT	PAPER NUMBER
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2141

DATE MAILED: 02/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/044,212

Applicant(s)

RAMAN, SUCHITRA

Examiner

Brian Gillis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/20/2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>2/28/2002</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The abstract of the disclosure is objected to because the abstract is in excess of 150 words. Correction is required. See MPEP § 608.01(b).

Claim Objections

3. Claims 2-10 and 13-15 are objected to because of the following informalities: Claims contain unnecessary brief summary of the claim. Appropriate correction is required.
4. Claim 23 is objected to because of the following informalities: the claim is missing language on line 4. Appropriate correction is required.
5. Claim 30 is objected to because of the following informalities: Claim 30 is dependent on claim 12 which recites a claim of a method for transmitting stream data in a network. The examiner interprets this as a typographical error and should be dependent on claim 27. For examination purpose the examiner assumes dependency

on claim 27. Please notify the examiner if this is incorrect. Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 31 and 32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Claims 31 and 32 recite the limitation "the data communications device" in line 4. There is insufficient antecedent basis for this limitation in these claims.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1-4, 7-9, 12, 14-19, 22-24, 27, 29-34 are rejected under 35 U.S.C. 102(e) as being anticipated by Weaver (US PG PUB US2003/0039248A1).

11. The claimed invention reads on Weaver as follows: (Claim 1 discloses) a method for transmitting stream data in a computer network, the method comprising the steps of: identifying at least two packets of stream data that are destined to a common location in a computer network (Weaver shows of a method where two packets are grouped based on the same next-hop address (page 2, paragraph 21, lines 7-9).); forming a pooled packet of stream data using the at least two packets of stream data (Weaver shows the packets are consolidated into one packet (page 2, paragraph 21, lines 9-12).); and transmitting the pooled packet to the common location in the network (Weaver shows that the consolidated packet is transmitted (page 2, paragraph 21, lines 12-13)).

12. (Claim 2 discloses) the method of claim 1 wherein the step of identifying comprises the steps of: detecting a first packet of stream data (Weaver shows a packet being identified (page 3, paragraph 26, lines 4-6).); and obtaining routing information based on information in the first packet that identifies a first network path upon which the first packet of stream data is to be routed (Weaver shows that the physical address of the packet is determined (page 4, paragraph 38, lines 2-5).); and detecting at least one second packet of stream data containing information that indicates the second packet is also to be routed on the first network path (Weaver shows that the second packets next hop address is compared (page 4, paragraph 40, lines 1-4)).

13. (Claim 3 discloses) the method of claim 2 wherein the first network path identifies a first predetermined number of network hops upon which the first packet is to be routed, and wherein the step of detecting at least one second packet comprises the

steps of: detecting at least one second packet that is to be routed on the first network path for a second predetermined number of network hops that exist along the first network path. (Weaver shows that the packets can be separated and grouped by selected criteria to assist in the consolidation process (page 2, paragraph 23, lines 15-17)).

14. (Claim 4 discloses) the method of claim 3 wherein the first predetermined number of network hops is greater than or equal to the second predetermined number of network hops. (Weaver shows that the packets can be separated and grouped by selected criteria to assist in the consolidation process (page 2, paragraph 23, lines 15-17)).

15. (Claim 7 discloses) the method of claim 1 wherein the step of identifying comprises the step of: identifying packets to be included in the at least two packets that have sizes that meet a predetermined size requirement, such that a sum of sizes of the at least two packets that form the pooled packet does not exceed a maximum packet size. (Weaver shows that the number of packets consolidated will be generally limited to the maximum transmission unit (page 2, paragraph 21, lines 19-22)).

16. (Claim 8 discloses) the method of claim 1 wherein the step of forming a pooled packet comprises the steps of: combining contents of each of the at least two packets into the pooled packet (Weaver shows that at least two packets are combined in a consolidated packet (page 2, paragraph 21, lines 7-12).); and generating a pooled packet index for the pooled packet, the pooled packet index indicating a location within the pooled packet of each of the at least two packets (Weaver shows that the header of

the first packet in the consolidated packet is used as an index (page 2, paragraph 22, lines 6-17); and wherein the step of transmitting the pooled packet to the common location in the computer network includes transmitting the pooled packet index to the common location in the computer network (Weaver shows that the packets are transmitted inherently including the header (page 2, paragraph 21, lines 12-13)).

17. (Claim 9 discloses) the method of claim 8 wherein the location of each of the at least two packets in the pooled packet indicates a starting position of each of the at least two packets in the pooled packet and wherein the pooled packet index indicates a length of each of the at least two packets in the pooled packet. (Weaver shows that the header of the first consolidated packet achieves this method (page 2, paragraph 22, lines 6-17)).

18. (Claim 12 discloses) a method for transmitting stream data in a network, the method comprising the steps of: receiving, at a first destination in the computer network, a pooled packet of stream data containing a representation of at least two packets of stream data (Weaver shows that the consolidated packet is received (page 2, paragraph 22, lines 4-6).); detecting if the pooled packet of stream data contains at least one packet of stream data that is to be extracted from the pooled packet of stream data at the first destination, and if the at least one packet of stream data is to be extracted from the pooled packet (Weaver shows that a deconsolidation subroutine is entered if a packet is to be extracted (page 2, paragraph 23, lines 1-3).); extracting the at least one packet of stream data from the pooled packet (Weaver shows the packet being extracted (page 2, paragraph 23, lines 6-9).); and transmitting the extracted at least one

packet of stream data to a destination associated with the at least one packet (Weaver shows the packet being forwarded to the appropriate location (page 2, paragraph 23, lines 9-13)).

19. (Claim 14 discloses) the method of claim 12 wherein the step of detecting detects that the pooled packet of stream data contains at least one packet of stream data that is to be extracted from the pooled packet if a destination indicator in the pooled packet is equal to a destination location of the first destination in the computer network. (Weaver shows that the address is compared and if the same it is extracted (page 2, paragraph 22, lines 11-17)).

20. (Claim 15 discloses) the method of claim 12 wherein the step extracting the at least one packet of stream data from the pooled packet comprises the steps of: obtaining, from a pooled packet index in the pooled packet, a streaming location and length of the at least one packet of stream data in the pooled packet (Weaver shows the header contains the starting location and length (page 2, paragraph 22, lines 11-17 and paragraph 23, lines 3-5).); and extracting the at least one packet of stream data from the pooled packet based on starting location and length of the at least one packet of stream data (Weaver shows the packet being extracted (page 2, paragraph 23, lines 1-5)).

21. (Claim 16 discloses) a data communications device comprising at least one communications interface a memory; a processor; and an interconnection mechanism coupling the at least one communications interface, the memory and the processor (Weaver shows of a router in Figure 2 and discussed on page 2 which contains the

listed components); wherein the memory is encoded with a packet pool controller application that when performed on the processor, produces a packet pool controller process that causes the data communications device to transmit stream data in a computer network by performing the operations of: identifying at least two packets of stream data that are destined to a common location in a computer network (Weaver shows of a method where 2 packets are grouped based on the same next-hop address (page 2, paragraph 21, lines 7-9).); forming a pooled packet of stream data using the at least two packets of stream data (Weaver shows the packets are consolidated into one packet (page 2, paragraph 21, lines 9-12).); and transmitting, via the at least one communications interface, the pooled packet to the common location in the computer network (Weaver shows that the consolidated packet is transmitted (page 2, paragraph 21, lines 12-13)).

22. (Claim 17 discloses) the data communications device of claim 16 wherein when the packet pool controller process causes the data communications device to perform the operation of identifying, the packet pool controller process causes the data communications device to perform the operations of: detecting a first packet of stream data (Weaver shows a packet being identified (page 3, paragraph 26, lines 4-6).); and obtaining routing information based on information in the first packet that identifies a first network path upon which the first packet of stream data is to be routed (Weaver shows that the physical address of the packet is determined (page 4, paragraph 38, lines 2-5).); and detecting at least one second packet of stream data containing information that indicates the second packet is also to be routed on the first network path (Weaver

shows that the second packets next hop address is compared (page 4, paragraph 40, lines 1-4)).

23. (Claim 18 discloses) the data communications device of claim 17 wherein the first network path identifies a first predetermined number of network hops upon which the first packet is to be routed, and wherein when the packet pool controller process causes the data communications device to perform the operation of detecting at least one second packet, the packet pool controller process causes the data communications device to perform the operation of: detecting at least one second packet that is to be routed on the first network path for a second predetermined number of network hops that exist along the first network path. (Weaver shows that the packets can be separated and grouped by selected criteria to assist in the consolidation process (page 2, paragraph 23, lines 15-17)).

24. (Claim 19 discloses) The data communications device of claim 18 wherein the first predetermined number of network hops is greater than or equal to the second predetermined number of network hops. (Weaver shows that the packets can be separated and grouped by selected criteria to assist in the consolidation process (page 2, paragraph 23, lines 15-17)).

25. (Claim 22 discloses) the data communications device of claim 16 wherein when the packet pool controller process causes the data communications device to perform the operation of identifying, the packet pool controller process causes the data communications device to perform the operation of: identifying packets to be included in the at least two packets that have sizes that meet a predetermined size requirement,

such that a sum of sizes of the at least two packets that form the pooled packet does not exceed a maximum packet size (Weaver shows that the number of packets consolidated will be generally limited to the maximum transmission unit (page 2, paragraph 21, lines 19-22)).

26. (Claim 23 discloses) the data communications device of claim 16 wherein when the packet pool controller process causes the data communications device to perform the operation of forming a pooled packet, the packet pool controller process causes the data communications device to perform the operation of comprises the steps of: combining contents of each of the at least two packets into the pooled packet (Weaver shows that at least two packets are combined in a consolidated packet (page 2, paragraph 21, lines 7-12).); and generating a pooled packet index for the pooled packet, the pooled packet index indicating a location within the pooled packet of each of the at least two packets (Weaver shows that the header of the first packet in the consolidated packet is used as an index (page 2, paragraph 22, lines 6-17).); and wherein the step of transmitting the pooled packet to the common location in the computer network includes transmitting the pooled packet index to the common location in the computer network (Weaver shows that the packets are transmitted inherently including the header (page 2, paragraph 21, lines 12-13)).

27. (Claim 24 discloses) the data communications device of claim 23 wherein the location of each of the at least two packets in the pooled packet indicates a starting position of each of the at least two packets in the pooled packet and wherein the pooled packet index indicates a length of each of the at least two packets in the pooled packet

(Weaver shows that the header of the first consolidated packet achieves this method (page 2, paragraph 22, lines 6-17)).

28. (Claim 27 discloses) a data communications device comprising: at least one communications interface; a memory; a processor; and an interconnection mechanism coupling the at least one communications interface, the memory and the processor (Weaver shows of a router in Figure 2 and discussed on page 2 which contains the listed components); wherein the memory is encoded with a packet pool controller application that when performed on the processor, produces a packet pool controller process that causes the data communications device to transmit stream data in a computer network by performing the operations of: receiving via the at least one communications interface operating as a first destination in the computer network, a pooled packet of stream data containing a representation of at least two packets of stream data (Weaver shows that the consolidated packet is received (page 2, paragraph 22, lines 4-6).); detecting if the pooled packet of stream data contains at least one packet of stream data that is to be extracted from the pooled packet of stream data at the first destination, and if the at least one packet of stream data is to be extracted from the pooled packet (Weaver shows that a deconsolidation subroutine is entered if a packet is to be extracted (page 2, paragraph 23, lines 1-3).): extracting the at least one packet of stream data from the pooled packet (Weaver shows the packet being extracted (page 2, paragraph 23, lines 6-9).); and transmitting the extracted at least one packet of stream data to a destination associated with the at least one packet (Weaver

shows the packet being forwarded to the appropriate location (page 2, paragraph 23, lines 9-13)).

29. (Claim 29 discloses) the data communications device of claim 27 wherein when the packet pool controller process causes the data communications device to perform the operation of detecting, the data communications device detects that the pooled packet of stream data contains at least one packet of stream data that is to be extracted from the pooled packet if a destination indicator in the pooled packet is equal to a destination location of the first destination in the computer network (Weaver shows that the address is compared and if the same it is extracted (page 2, paragraph 22, lines 11-17)).

30. (Claim 30 discloses) the data communications device of claim 27 wherein when the packet pool controller process causes the data communications device to perform the operation of extracting the at least one packet of stream data from the pooled packet, the packet pool controller process causes the data communications device to perform the operation of: obtaining, from a pooled packet index in the pooled packet, a starting location and length of the at least one packet of stream data in the pooled packet (Weaver shows the header contains the starting location and length (page 2, paragraph 22, lines 11-17 and paragraph 23, lines 3-5).); and extracting the at least one packet of stream data from the pooled packet based on starting location and length of the at least one packet of stream data (Weaver shows the packet being extracted (page 2, paragraph 23, lines 1-5)).

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31. (Claim 31 discloses) a computer program product having a computer-readable medium including computer program logic encoded thereon that, when performed on a computer system having a coupling of a memory, a processor, and at least one communications interface (Weaver shows a system of storage medium having a plurality of machine-readable instructions which are executed on a computing system (page 6, #37,38), causes the data communications device to transmit stream data in a computer network by performing the operations of: identifying at least two packets of stream data that are destined to a common location in a computer network (Weaver shows of a method where 2 packets are grouped based on the same next-hop address (page 2, paragraph 21, lines 7-9).); forming a pooled packet of stream data using the at least two packets of stream data (Weaver shows the packets are consolidated into one packet (page 2, paragraph 21, lines 9-12).); and transmitting the pooled packet to the common location in the computer network (Weaver shows that the consolidated packet is transmitted (page 2, paragraph 21, lines 12-13)).

32. (Claim 32 discloses) a computer program product having a computer-readable medium including computer program logic encoded thereon that, when performed on a computer system having a coupling of a memory, a processor, and at least one communications interface (Weaver shows a system of storage medium having a plurality of machine-readable instructions which are executed on a computing system (page 6, #37,38), causes the data communications device to transmit stream data in a computer network by performing the operations of: receiving via the at least one communications interface operating as a first destination in the computer network, a

pooled packet of stream data containing a representation of at least two packets of stream data (Weaver shows that the consolidated packet is received (page 2, paragraph 22, lines 4-6).); detecting if the pooled packet of stream data contains at least one packet of stream data that is to be extracted from the pooled packet of stream data at the first destination, and if the at least one packet of stream data is to be extracted from the pooled packet (Weaver shows that a deconsolidation subroutine is entered if a packet is to be extracted (page 2, paragraph 23, lines 1-3).); extracting the at least one packet of stream data from the pooled packet (Weaver shows the packet being extracted (page 2, paragraph 23, lines 6-9).); and transmitting the extracted at least one packet of stream data to a destination associated with the at least one packet via the at least one communications interface (Weaver shows the packet being forwarded to the appropriate location (page 2, paragraph 23, lines 9-13)).

33. (Claim 33 discloses) a data communications device comprising; at least one communications interface; a memory; a processor; and an interconnection mechanism coupling the at least one communications interface, the memory and the processor (Weaver shows of a router in Figure 2 and discussed on page 2 which contains the listed components); wherein the memory is encoded with a packet pool controller application that when performed on the processor, produces a packet pool controller process that causes the data communications device to transmit stream data in a computer network by providing means including: means for identifying at least two packets of stream data that are destined to a common location in a computer network (Weaver shows of a method where 2 packets are grouped based on the same next-hop

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address (page 2, paragraph 21, lines 7-9).); means for forming a pooled packet of stream data using the at least two packets of stream data (Weaver shows the packets are consolidated into one packet (page 2, paragraph 21, lines 9-12).); and means for transmitting the pooled packet to the common location in the computer network (Weaver shows that the consolidated packet is transmitted (page 2, paragraph 21, lines 12-13)).

34. (Claim 34 discloses) a data communications device comprising; at least one communications interface; a memory; a processor; and an interconnection mechanism coupling the at least one communications interface, the memory and the processor (Weaver shows of a router in Figure 2 and discussed on page 2 which contains the listed components); wherein the memory is encoded with a packet pool controller application that when performed on the processor, produces a packet pool controller process that causes the data communications device to transmit stream data in a computer network by providing means including: means for receiving via the at least one communications interface operating as a first destination in the computer network, a pooled packet of stream data containing a representation of at least two packets of stream data (Weaver shows that the consolidated packet is received (page 2, paragraph 22, lines 4-6).); means for detecting if the pooled packet of stream data contains at least one packet of stream data that is to be extracted from the pooled packet of stream data at the first destination, and if the at least one packet of stream data is to be extracted from the pooled packet (Weaver shows that a deconsolidation subroutine is entered if a packet is to be extracted (page 2, paragraph 23, lines 1-3).); means for extracting the at least one packet of stream data from the pooled packet

(Weaver shows the packet being extracted (page 2, paragraph 23, lines 6-9).); and means for transmitting the extracted at least one packet of stream data to a destination associated with the at least one packet (Weaver shows the packet being forwarded to the appropriate location (page 2, paragraph 23, lines 9-13)).

Claim Rejections - 35 USC § 103

35. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

36. Claims 5 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weaver (US PG PUB US2003/0039248A1) in view of Brech et al (US Patent #5,754,768).

37. Claims 5 and 20 disclose the method and device of claims 2 and 17 wherein the steps of detecting a first packet and detecting a second packet occur in relation to each other within a pooling time window such that the step of forming a pooled packet forms a pooled packet from only those packets that arrive within the pooling time window and that are destined towards a common location in the computer network. Weaver teaches of the limitations of claim 2 and 17 as recited above (page 3, paragraph 26, lines 4-6, page 4, paragraph 38, lines 2-5 and paragraph 40, lines 1-4). It fails to teach of a time window where the packets are pooled if they arrive within a specified window. Brech et al teaches of a time window, which allows each packet train to be some arbitrary length,

which is determined by the number of packets that arrive for a session during a time window (column 5, lines 53-59).

38. Weaver and Brech et al are analogous art because they are both related to packet grouping.

39. At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the time window in Brech et al and adapt it to the method in Weaver because using the time window for each packet train allows multiple packet trains to be created at the same time (Brech et al, column 5, lines 51-53).

40. Claims 6 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weaver (US PG PUB US2003/0039248A1) in view of Carlson et al (US Patent #6,298,070).

41. Claims 6 and 21 disclose the method and device of claims 1 and 16 wherein the step of identifying further comprises the step of: identifying a predetermined number of packets to be included in the at least two packets, such that step of forming forms a pooled packet that contains the predetermined number of packets destined to a common location in a computer network. Weaver teaches of the limitations of claim 1 and 16 as recited above (page 2, paragraph 21, lines 7-13). It fails to teach of pooling packets into a group of a predetermined amount. Carlson et al teaches of a packet controller, which determines the optimum number of packets to send in a train based on calculations (column 3, lines 19-21).

42. Weaver and Carlson et al are analogous art because they are both related to packet grouping.

43. At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the packet controller in Carlson et al and adapt it to the method in Weaver because the packet controller will improve performance even in times of a light, variable, or unpredictable packet-traffic rate (Carlson, column 1, lines 49-52).

44. Claims 10, 13, 25, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weaver (US PG PUB US2003/0039248A1) in view of Sonksen (US PG PUB US2003/0046429A1).

45. Claims 10 and 25 disclose the method and device of claim 8 and 23 wherein the pooled packet index includes at least one time to live indicator indicating a number of network hops along a route towards the common location in the computer network that at least one packet in the pooled packet is to be transmitted. Weaver teaches of the limitations in claims 8 and 23 as recited above (page 2, paragraph 21, lines 7-13, and paragraph 22, lines 6-17). It fails to teach of using a time to live indicator indicating a number of network hops along a route. Sonksen teaches of a time to live (TTL) field may be placed in the header of a packet (page 11, paragraph 123, lines 2-4).

46. Weaver and Sonksen are analogous art because they are both related to data processing.

47. At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the TTL field in Sonksen with the method in Weaver because this would allow packets to be carried and extracted along different hops as the pooled packet travels through the network. This would allow a router to reach its ultimate goal

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of analyzing, processing and transmitting packets at the maximum rate at which the can be received (Sonksen, page 1, paragraph 4, lines 5-8).

48. Claims 13 and 28 disclose the method and device of claims 12 and 27 wherein the step of receiving comprises the step of decrementing a time to live indicator within the pooled packet; and wherein the step of detecting detects that the pooled packet of stream data contains at least one packet of stream data that is to be extracted from the pooled packet if the time to live indicator within the pooled packet has expired. Weaver teaches of the limitations in claims 12 and 27 as recited above (page 2, paragraph 22, lines 4-6, paragraph 23, lines 1-3 and lines 6-13). It fails to teach of decrementing a time to live indicator within the pooled packet. Sonksen teaches of a TTL field with is decremented at each stop and when the field is at zero the packet may be dropped (page 11, paragraph 123, lines 4-7)

49. Weaver and Sonksen are analogous art because they are both related to data processing.

50. At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the decrementing TTL field function in Sonksen with the method in Weaver because this speeds up the routing process and can impact latency and throughput of the router/network (Sonksen, page 1, paragraph 3, lines 11-14).

51. Claims 11 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weaver (US PG PUB US2003/0039248A1) in view of Ebata et al (US PG PUB US2002/0042837A1).

52. Claims 11 and 26 disclose the method and device of claims 1 and 16 wherein the at least two packets are encoded to be transported through the computer network using a stream transfer protocol. Weaver teaches of the limitations of claim 1 and 16 as recited above (page 2, paragraph 21, lines 7-13). It fails to teach of having the data encoded using a stream transfer protocol. Ebata et al teaches of a packet analyzer, which analyzes the packets for streaming data, if streaming data is detected, the invention continues processing the packets (page 3, paragraph 51, lines 1-5).

53. Weaver and Ebata et al are analogous art because they are both related to packet transmission.

54. At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the packet analyzer in Ebata et al with the method of Weaver because having only stream data in a packet decreases the delay on the stream and improves quality (Ebata, page 1, paragraph 9, lines 1-7).

Conclusion

55. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Carlson (US Patent #5,859,853) teaches of dynamically adjusting the number of packets sent in a group. Brech et al (US Patent #5,598,535) teaches of a system for selectively grouping packets from different sessions.

56. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Gillis whose telephone number is 571-272-7952. The examiner can normally be reached on M-F 7:00-3:30.

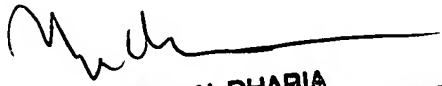
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57. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 571-272-3880. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

58. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brian Gillis
Examiner
Art Unit 2141

BJG


RUPAL DHARIA
SUPERVISORY PATENT EXAMINER